

REMARKS

1. The Examiner's restriction to claims 17-24 and withdrawal of claims 1-16, noting Applicant's timely traversal, is acknowledged.

2. The amendments to claims 17 and 18 are meant to clarify the subject matter claimed without changing the scope thereof. No new matter is introduced by these amendments. Antecedent basis for these claim amendments is found for example in claims 1, 8, 9, and 10, and in the specification at p. 17 line 28-29. Claim 20 is amended to positively recite the listed elastomers.

Applicant requests that new claims 25-41 be entered in the application. New claims 25-41 introduce no new matter and are introduced to distinctly claim aspects of the current invention. Antecedent basis for claim 25 may be found in claim 21. Antecedent basis for claim 26 may be found on p. 2 lines 20-22. Antecedent basis for claim 27 may be found on p. 15 lines 8-16. Antecedent basis for claim 28 may be found in claim 9. Antecedent basis for claim 29 may be found in claims 17-18 and on p. 15 line 8 through p. 16 line 34. Antecedent basis for claim 30 may be found on p. 8 lines 22-27. Antecedent basis for claim 31 may be found in claim 1 and 17. Antecedent basis for claim 32 may be found in claims 7 and 19. Antecedent basis for claims 33 through 37 may be found for example in claims 20 through 24, respectively. Antecedent basis for claims 38-39 may be found for example on p. 5 lines 12-20, p. 8 lines 18-21, and 29-32, and p. 13 lines 7-26. Antecedent basis for claim 40 may be found for example on p. 9 lines 13-26 and p. 11. Antecedent basis for claim 41 may be found p.12 line 30.

3. Applicant acknowledges the Examiner's rejection of claims 17-24 under 35 U.S.C. 102(b) as being anticipated by Drake et al but respectfully traverses this rejection.

The following is a familiar quote from MPEP §2131:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior

art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In regard to claim 17, Applicant submits that the *Verdegaal Bros.* test is not met by the Drake reference. Claim 17 (currently amended) sets forth that *"the rubber member is formed and arranged to reside between said metal members in at least one of a neutral state and a state of compression at a temperature in the range of from about -20°C to about 120°C,"* and these elements are not expressly or inherently described by Drake et al. In particular, the requirement that the rubber member be *"formed"* is described throughout the applicant's specification and other claims as meaning that the rubber has been vulcanized in a shape-forming mold sufficient to substantially cure the rubber (p. 15, lines 12-17; p. 15 line 32-33; and claims 1, 8-10, and 12-14), and that the formed rubber can be handled and manipulated without affecting its dimensional integrity (p. 33 lines 5-8). In contrast, Drake et al disclose an *"uncured adhesive elastomeric composition"* and *"a film or spreadable liquid"* (abstract), neither of which can be considered to be formed. Drake et al are clear that the only bonding anticipated is that which occurs when unvulcanized or uncured compositions are cured in contact with a substrate (Drake et al Col. 6 lines 22-24), a process commonly known as vulcanization bonding (see p. 2 lines 5-19). It is well known that such unvulcanized elastomeric compositions cannot be handled or manipulated without adversely affecting dimensional integrity, and thus are not formed in the common sense of the word. Applicant respectfully submits that Drake et al fail to disclose that a *"formed"* rubber member or a *"cured rubber member,"* as taught in claim 17 of the present invention, could ever result in a useful rubber-to-metal bonded article in the absence of an adhesive layer between rubber and metal. While Drake et al teach that their elastomer composition is useful in various rubber-to-metal applications, all such uses will be based on vulcanization bonding, and thus Applicant's use of *"formed"* rubber in corresponding applications is patentably distinguishable from Drake et al.

In regard to claims 18-24, if claim 17 (currently amended) is allowed upon reconsideration, then claims 18-24 should be allowable as depending from claim 17.

Nevertheless, in regard to claim 24, Applicant submits that the use of *"at least two ... curatives, each said curative having an activation temperature distinct from the*

other of said curative," is not taught by Drake et al. Thus, Applicant respectfully traverses the rejection of claim 24 over Drake et al.

5. Applicant acknowledges the Examiner's rejection of claims 17-24 under 35 U.S.C. 102(b) as being anticipated by Ravagnani et al but respectfully traverses this rejection. In regard to claim 17 (currently amended), Applicant submits that the *Verdegaal Bros.* test is not met by the Ravagnani reference. Claim 17 sets forth "*at least a first metal member, a second metal member, and a cured rubber member disposed between...*" wherein "*the rubber member is formed and arranged to reside between said metal members in at least one of a neutral state and a state of compression at a temperature in the range of from about -20°C to about 120°C,*" and these elements are not expressly or inherently described by Ravagnani et al. Ravagnani et al teach a method wherein a "composition is brought into contiguous relationship with a metal member in an unvulcanized product and then the product is vulcanized to yield a cured end product" (Abstract). Ravagnani et al teach improved rubber adhesion to metal wires embedded in the uncured composition; in other words, vulcanization bonding. Applicant submits that embedded wires or other embedded metal does not anticipate the two "*metal members*" of claim 17 with "*a cured rubber member disposed between*". Embedding metal in rubber is a fundamentally different process from disposing cured rubber between two metal members, and the resulting articles are also fundamentally different, even if one takes the strained view that the rubber residing between the two embedded wires somehow equates to Applicant's "*rubber member*". By necessity, rubber residing between two embedded wires is produced by first embedding the wires in unvulcanized rubber, then vulcanizing both together, as taught by Ravagnani et al (Abstract). The resulting article as a whole may be considered to be formed, but it is hard to see how the tiny portion of the surrounding rubber which resides between the two pieces of embedded wire can be said to anticipate applicant's "*formed*" rubber or "*a cured rubber member*" "*disposed between*" two metal members as set forth in claim 17. Moreover, as discussed above, "*formed*" rubber means sufficiently cured in a shape-forming mold to allow significant handling or manipulation, and this is in direct conflict with the teaching of Ravagnani et al regarding

bringing unvulcanized rubber together with the metal wires and vulcanizing them together. Even though Ravagnani et al suggest their composition can be utilized in other rubber-to-metal applications, all such uses will be based on vulcanization bonding, and thus Applicant's use of "*formed*" rubber in corresponding applications is patentably distinguishable from Ravagnani et al.

In regard to claims 18-24, if claim 17 (currently amended) is allowed upon reconsideration, then claims 18-24 should be allowable as depending from claim 17.

In regard to claim 20, Applicant thanks the Examiner for pointing out the lack of positive recitation of ethylene-alpha olefin. Claim 20 (currently amended) now positively recites a group of ethylene-alpha olefins, which is not mentioned by Ravagnani et al. Applicant thus believes claim 20 is now patentable over Ravagnani et al.

In regard to claim 24, Applicant submits that the use of "*at least two ... curatives, each said curative having an activation temperature distinct from the other of said curative,*" is not taught by Ravagnani et al. Thus, Applicant respectfully traverses the rejection of claim 24 over Ravagnani et al.

6. Applicant acknowledges the Examiner's rejection of claims 17-24 under 35 U.S.C. 102(b) as being anticipated by Nagel but respectfully traverses this rejection. Nagel, much like Drake et al and Ravagnani et al, clearly teaches a vulcanization bonding method and resulting articles, wherein a curable elastomer composition is applied to a polar surface and cured "while applied to the polar surface" (Col. 2 lines 56-64). Again, Applicant respectfully submits that his use of "*formed*" rubber and the resulting article is fundamentally different and distinguishable from the vulcanization bonding method and resulting articles as taught by Nagel (or the other references) and therefore not anticipated by said references. While Nagel places an uncured and therefore inherently unformed composition between two polar surfaces of metal, Applicant arranges a "*formed*" rubber member between two metal members. The resulting articles of claim 17 are generally distinguishable, e.g., in external shape or appearance of the rubber element, internal state of stress of the rubber element, and performance characteristics of the article, from similar articles made by vulcanization bonding according to the teaching of Nagel, Drake or Ravagnani.

In regard to claims 18-24, if claim 17 (currently amended) is allowed upon reconsideration, then claims 18-24 should be allowable as depending from claim 17.

Nevertheless, in regard to claim 24, Applicant submits that the use of "*at least two ... curatives, each said curative having an activation temperature distinct from the other of said curative,*" is not taught by Nagel. Thus, Applicant respectfully traverses the rejection of claim 24.

7. In light of the traversals and arguments advanced in paragraphs 3-6 above, and the clarifying amendments to claims 17, 18 and 20, it is submitted that the §102(b) rejections of claims 17-24 have been overcome. Nevertheless, if the Examiner disagrees, Applicant reserves the right to make suitable complying amendments.

8. The examiner's attention is now drawn to newly presented independent claims 29, 38 and 39. Applicant respectfully submits that the new claims are patentably distinct over the prior art of record. Claim 29 is to an article comprising a rubber member and two structural members, wherein said rubber member is: press fit between said structural members; bonded to said structural members in the absence of an adhesive layer; and in at least one of a neutral state and a state of compression in a certain temperature range. Applicant believes this claim is clearly distinguishable from the vulcanization bonded articles disclosed in the prior art of record. Claim 38 is to a torsional vibration damper comprising an annular rubber member and two metal members defining an annular gap; wherein the rubber member is press fit into the annular gap and bonded to the two metal members in the absence of an adhesive layer; and wherein the rubber member is the reaction product of a rubber composition comprising an elastomer, a rubber-to-metal adhesive adjuvant, and two curatives, each said curative having an activation temperature distinct from the other of said curative. Claim 39 is to a torsional vibration damper comprising an annular rubber member sandwiched between two rigid members at least one of which is metal, said rubber member being the reaction product of a rubber composition comprising an elastomer, a rubber-to-metal adhesive adjuvant, and two curatives; each said curative having an activation temperature distinct from the other of said curative. Applicant believes these

claims are patentably distinct from the prior art of record, none of which mentions two curatives each said curative having an activation temperature distinct from the other of said curative.

9. Applicant respectfully requests that the Examiner consider the remainder of the references cited in the information disclosure, and signify with her initials all references considered.

FEE STATEMENT

Any fees which may be required as a result of the amendments made herein are authorized to be charged to Assignee's deposit account number 07-0475.

Respectfully submitted,


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Dated: 2 September 2004

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